CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.06/KRIDL/WMM/Gradation/2014-15

05.05.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager - 1,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at Muninagappa Layouts in Ward No.06, Rachenahalli Village Limits, BBMP, Bangalore.

Reference : AEE/BTP/(WO)/11/2014-15 Dated: 02.05.2014

Date of Testing : 05.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25500**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	885	885	3.5	96.5	95-100
22.4	5420	6305	24.7	75.3	60-80
11.2	5910	12215	47.9	52.1	40-60
4.75	4005	16220	63.6	36.4	25-40
2.36	3850	20070	78.7	21.3	15-30
0.600	2540	22610	88.7	11.3	8-22
0.075	2605	25215	98.9	1.1	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

M/s. Civil-Tech Consultants & Engineers
23/14, 7th Cross, 3rd Stage,
4th Block, Shakthiganapathinagara,
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Bangalore-560079.

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಬೆಂಗಳೂರು-24

CIVIL-TECH CONSULTANTS AND ENGINEERS

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Job No.: CTCE/BBMP/W.No.06/KRIDL/SDBC/Bitumen/2014-15 17.05.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP,
AGENCY	**Technical Manager - 1,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements to roads and drains at Muninagappa Layouts in Ward No.06, Rachenahalli Village Limits, BBMP, Bangalore.
REFERENCE	AEE/BTP/(WO)/11/2014-15 Dated: 02.05.2014
SAMPLE I/D	Roads and drains in Ward No.06,
DATE OF TESTING	17.05.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	476	474
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	24	26.00
7. Bitumen content in %	4.80	5.20
8. Average	**5.00**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	37.85	7.95	7.95	92.05	90-100
4.75	263.1	55.27	63.22	36.78	35-51
2.36	56.79	11.93	75.16	24.84	24-39
1.18	41.52	8.72	83.88	16.12	15-30
0.3	26.45	5.56	89.43	10.57	9-19
0.075	28.1	5.90	95.34	4.66	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	25.48	5.10	5.10	94.90	90-100
4.75	245.3	49.06	54.16	45.84	35-51
2.36	92.45	18.49	72.65	27.35	24-39
1.18	53.78	10.76	83.40	16.60	15-30
0.3	33.75	6.75	90.15	9.85	9-19
0.075	24.56	4.91	95.06	4.94	3-8

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